We claim:

- A process for preparing polyisobutenyl (thio)ethers by
 reacting a polyisobutene epoxide having at least one terminal epoxide group with
 - i) itself,
- ii) other epoxides and/or
 - iii) nucleophiles selected from among alcohols and thiols,

in the presence of

15

45

- a) a Lewis-acid compound as catalyst and/or
- b) a cationic photoinitiator with illumination.
- 20 2. A process as claimed in claim 1, wherein the polyisobutene epoxide has one of the formulae Ia to Id

25
$$A = \begin{bmatrix} CH_2 & CH_2 \\ R^2 \end{bmatrix}_m$$
 $A = \begin{bmatrix} CH_3 & CH_3 \\ CH_3 \end{bmatrix}_m$

30 Ia

where A is hydrogen or the radical of an inifer molecule, B is chlorine or the radical of a coupling agent, R¹ is a chain comprising isobutene units, R² is hydrogen or methyl and m is an integer from 1 to 6, preferably 1, 2 or 3.

3. A process as claimed in claim 1 or 2, wherein the Lewis-acid compound is selected from among halides and sulfonates of boron, aluminum, gallium, antimony, titanium, tin, vanadium, iron and the rare earth metals.

5

4. A process as claimed in claim 3, wherein the Lewis-acid compound is selected from among boron trifluoride, boron trichloride, aluminum chloride, iron trichloride and titanium tetrachloride.

10

- 5. A process as claimed in claim 1 or 2, wherein the cationic photoinitiator is selected from among sulfonium and iodonium salts.
- 15 6. A process as claimed in any of the preceding claims, wherein the alcohol or thiol contains at least two hydroxyl and/or mercapto groups.
- 7. A polyisobutenyl (thio)ether obtainable by a process as claimed in any of claims 1 to 6.
 - 8. A polyisobutenyl (thio)ether as claimed in claim 7 which is obtainable from a polyisobutene epoxide of the formula Id as set forth in claim 2.

25

- 9. A curable composition comprising
 - i) a polyisobutene epoxide having at least one terminal epoxide group,

30

- ii) an epoxide different therefrom and
- iii) optionally a poly(thi)ol.

35

40